IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

e application of: CHEUNG et al.

Attorney Docket No.: IPVBP005

Application No.: 10/826,528

Examiner:

Filed: April 15, 2004

Group: 2681

Title: METHOD AND APPARATUS FOR

WIRELESS AUDIO DELIVERY

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail to: Commissioner for

January 18, 2005 Patents, Washington

Maria Shih

INFORMATION DISCLOSURE STA 37 CFR §§1.56 AND 1.97(b)

Commissioner for Patents Washington, DC 20231

Dear Sir:

The references listed in the attached PTO Form 1449, copies of non-US patent publications/applications are attached, may be material to examination of the above-identified patent application. Applicants submit these references in compliance with their duty of disclosure pursuant to 37 CFR §§1.56 and 1.97. The Examiner is requested to make these references of official record in this application.

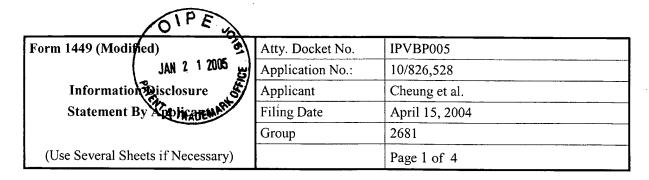
This Information Disclosure Statement is not to be construed as a representation that a search has been made, that additional information material to the examination of this application does not exist, or that these references indeed constitute prior art.

This Information Disclosure Statement is: (i) filed within three (3) months of the filing date of the above-referenced application, (ii) believed to be filed before the mailing date of a first Office Action on the merits, or (iii) believed to be filed before the mailing of a first Office Action after the filing of a Request for Continued Examination under §1.114. Accordingly, it is believed that no fees are due in connection with the filing of this Information Disclosure Statement.

Respectfully submitted,

C. Douglass Thomas

Reg. No. 32, 947



U.S. Patent Documents

Examiner Initial	No.	Patent No.	Date	Patentee	Class	Sub- class	Filing Date
	1.	3,974,335	Aug-76	Blackledge			
-	2.	2002/0090103 A1	Jul-02	Calisto, JR.			
	3.	6,058,315	May-00	Clark		1	
	4.	2003/0118198 A1	Jun-03	Croft, III et al.			
	5.	6,535,612 B1	Mar-03	Croft, III et al.	- 		
	6.	6,584,205 B1	Jun-03	Croft, III et al.	-		
	7.	5,648,824	Jul-97	Dunn et al.			
	8.	5,802,190	Sep-98	Ferren			
	9.	2003/0092377 A1	May-03	Hill	-		
	10.	2002/0048382 A1	Apr-02	Hou			
	11.	2002/0183648 A1	Dec-02	Hou			
	12.	6,322,521 B1	Nov-01	Hou			
	13.	5,835,732	Nov-98	Kikinis et al.		1	
	14.	2003/0035552 A1	Feb-03	Kolano et al.			
	15.	5,793,875	Aug-98	Lehr et al.			
	16.	5,313,663	May-94	Norris			
	17.	2001/0055397 A1	Dec-01	Norris et al.			
	18.	2003/0091200 A1	May-03	Pompei			
	19.	6,086,541	Jul-00	Rho			
	20.	2002/0048385 A1	Apr-02	Rosenberg			
	21.	5,943,430	Aug-99	Saitoh			
	22.	6,011,855	Jan-00	Selfridge et al.			
	23.	5,357,578	Oct-94	Taniishi		 	
	24.	6,650,755 B2	Nov-03	Vaudrey et al.			
	25.	6,477,258 B1	Nov-02	Watson et al.			
	26.	6,496,205 B1	Dec-02	White et al.			
	27.	5,572,575	Nov-96	Yamamoto et al.			
	28.	2002/0054689 A1	May-02	Zhang et al.			
	29.	6,453,045 B1	Sep-02	Zurek et al.			
			Foreig	n Documents		,l	
Examiner				Date Considered			

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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								slation
Init.		Document No.	Date	Country	Class	Subclass	Yes	No
	_1							·····
		Other Docume	nts (Includir	g Author, Title, Date,	Pertinent Pages	, etc.)		
	Α			nere you want it," Holos		bs, Inc., 2002	2,	
	- n			y.html (downloaded 1/1 erican Technology Cor		.1 10		
	В	1					22	1.2
	С		-	Sonic Sound," America				
	D	"Theory, History, a	and the Advar	ncement of Parametric	Loudspeakers - A	Technology	Overvi	ew,"
		White Paper, Ame	rican Technol	logy Corporation, 2002 stem, Model Series: 22	, pp. 1-2/.	mation Ame	ricon	
	E	Technology Corpo		stelli, Model Series. 22	to, Froduct infor	mation, Ame	ilcan	
	F	A. C. Baker, "Non	linear pressur	e fields due to focused	circular apertures	," The Journa	al of the	;
		Acoustical Society	of America,	91(2), February 1992,	pp. 713-717.			
	G			derations of Parametric				98
	 			derwater Technology,				
	H	B. G. Lucas et al., America, 73 (6), Ju		arametric focusing sour	ce," I ne Journal c	of the Acousti	icai Soc	ciety of
	I	B G Lucas et al	The field of	a focusing source, "The	· Journal of the Ac	coustical Soc	iety of	
	1.	America, 72(4), O			, , , , , , , , , , , , , , , , , , , ,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	
	J	B.W. Lawton, "Da	mage to hum	an hearing by airborne	sound of a very hi	gh frequency	or ultr	asonic
	frequency," Institute of Sound and Vibration Research, Contract Research Report 343/				/2001,	2001,		
•	1	pp. 1-77.	. 1 "6			1 " TI	T	1 6
	K	 C. M. Darvennes et al., "Scattering of sound by sound from two Gaussian beams," The Journal of the Acoustical Society of America, 87(5), May 1990, pp. 1955-1964. C.M. Darvennes et al., "Effects of absorption on the nonlinear interaction of sound beams," The Journal of the Acoustical Society of America, 89(3), March 1991, pp. 1028-1036. D. Marculescu et al., "Ready to Ware," IEEE Spectrum, October 2003, pp. 28-32. 						
	L					The		
	M							
	N	D.I. Havelock, "D	irectional Lo	udspeakers Using Soun	d Beams," J. Audi	o Eng. Soc.,	Vol. 48	3, No.
		10, October 2000,						
	0	1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 =				Beam	s,"	
				15, No. 1, July-Sept. 19			••••	
	P			orne Ultrasonics for Ger		Sound Beams	," J. Aı	ıdio
_	Q	Eng. Soc., Vol. 47, No. 9, September 1999, pp. 726-731. G. Garrett et al., "Nearfield of a large acoustic transducer, Part II: Parametric radiation," The Journal of the Acoustical Society of America, 74(3), September 1983, pp. 1013-1020.				e		
	~							
R G. Garrett et al., "Nearfield of a large acoustic transducer. Par						urnal		
		of the Acoustical	Society of A	merica, 75(3), March 19	984, pp. 769-779.			
	S			tation of Non-Linear A	coustics in Under	water Transm	itting	
				965) 2(4), 435-461.		105 105		_
_	T			el Communications, 20				
	U			of sound waves. Part IV			l, "The	Journa
	17			merica, 86(5), Novemb			1	
	V	,		a large acoustic transder al of the Acoustical Science of the Acoustic of th				
<u> </u>		1 requeries radiation	ni, incouli	T		, 13(3), way	1704,	ή.
Exami	ner			Date Consid	ered			
				1				

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Information Disclosure	Applicant	Cheung et al.
Statement By Applicant	Filing Date	April 15, 2004
	Group	2681
(Use Several Sheets if Necessary)		Page 3 of 4

	1383-1391.
W	J. Meyer, "Microphone Array for Hearing Aids taking into Account the Scattering of the Head," 2001 IEEE Workshop on Applications of Signal Processing to Audio and Acoustics, 21-24 October 2001, pp. 27-30.
X	J. N. Tjotta et al., "Propagation and interaction of two collinear finite amplitude sound beams," The Journal of the Acoustical Society of America, 88(6), December 1990, pp. 2859-2870.
Y	J. Zemanek, "Beam Behavior within the Nearfield of a Vibrating Piston," The Journal of the Acoustical Society of America, Vol. 42, No. 1 (Part 2), 1971, pp.181-191.
Z	K. Aoki et al., "Parametric Loudspeaker-Applied Examples," Electronics and Communications in Japan, Part 3, Vol. 77, No. 1, 1994, pp. 64-74.
AA	K. Maney, "Sound technology turns the way you hear on its ear," USA Today, May 2003, pp. 1-4.
AB	M. Greenspan, "Piston radiator: Some extensions of the theory," The Journal of the Acoustical Society of America, 65(3), Mar. 1979, pp. 608-621.
AC	M. Yoneyama et al., "The audio spotlight: An application of nonlinear interaction of sound waves to a new type of loudspeaker design," The Journal of the Acoustical Society of America, 73(5), May 1983, pp. 1532-1536.
AD	M.A. Averkiou et al., "Self-demodulation of amplitude- and frequency-modulated pulses in a thermoviscous fluid," The Journal of the Acoustical Society of America, 94(5), November 1993, pp. 2876-2883.
AE	M.B. Bennett et al., "Parametric array in air," The Journal of the Acoustical Society of America,
AF	Nextel i60c Phone Details, http://nextelonline.nextel.com, downloaded April 22, 2003, pp. 1-2
AG	downloaded April 22, 2003, p. 1.
AH	P.J. Westervelt, "Parametric Acoustic Array," The Journal of the Acoustical Society of America, Vol. 35, No. 4, April 1963, pp. 535-537.
AI	Palm TM m515 Handheld, Palm Store of Yahoo! Shopping, downloaded April 23, 2003, pp. 1-2.
AJ	Palm TM PalmModem® Connectivity Kit, Palm Store of Yahoo! Shopping, downloaded April 23, 2003, pp. 1-2.
AK	Palm TM Tungsten TM C Handheld, Palm Store of Yahoo! Shopping, downloaded April 23, 2003, pp. 1-3
AL	Palm TM Zire TM 71 Handheld, Palm Store of Yahoo! Shopping, downloaded April 23, 2003, pp. 1-3.
AM	Loudspeaker," ACUSTICA, Vol. 73 (1991), pp. 215-217.
AN	T. Kamakura et al., "Harmonic generation in finite amplitude sound beams from a rectangular aperture source," The Journal of the Acoustical Society of America, 91(6), June 1992, pp. 3144-3151.
AO	T. Kamakura et al., "Nonlinearly generated spectral components in the nearfield of a directive sound source," The Journal of the Acoustical Society of America, 85(6), June 1989, pp. 2331-2337.
AP	T.D. Kite et al., "Parametric Array in Air: Distortion Reduction by Preprocessing," Proceedings of the 16th International Congress on Acoustics and the 135th Meeting of the Acoustical Society of America, Seattle, WA, June 1998, pp. 1091-1092.
AC	7 T.G. Muir et al., "Parametric Acoustic Transmitting Arrays," The Journal of the Acoustical Society of America, Vol. 52, No. 5, Part 2, 1972, pp.1481-1486.
AR	77.1.16.31.4

Examiner	Date Considered

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Statement By Applicant	Filing Date	April 15, 2004
Statement 2, 1-pp	Group	2681
(Use Several Sheets if Necessary)		Page 4 of 4

AS	W.F. Druyvesteyn et al., "Personal Sound," J. Audio Eng. Soc., Vol. 45, No. 9, September 1997
1	COE 701
 AT	Y.W. Kim et al., "Novel Preprocessing Technique to Improve Harmonic Distortion in Airborne
1	Parametric Array," ICSP '02 Proceedings, pp.1815-1818
 AU	Z.A. Gol'dberg, "Certain Second-Order Quantities in Acoustics," SOV PHYS ACOUST, Vol. 3
	1957, pp. 157-162.

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